

# Yusra Suhail

Software Developer || Human Computer Interaction || Machine Learning || IT consultant

[Yusra.suhail99@gmail.com](mailto:Yusra.suhail99@gmail.com) || 936-320-5034 || [Portfolio](#)

## PROFILE

Highly motivated and self-directed Software Developer skilled in design, programming, and debugging. Exhibited problem-solving skills through leading multiple projects as an IT consultant, Research Assistant, and a student. Exceptional detail-oriented communication ensuring high-quality work. Passionate about working on Human-Centered designs.

## EDUCATION

**University of Rhode Island, Kingston, RI**  
**Master of Science in Computer Science**

**May 2025**

**Bachelor of Science in Computer Science, *Summa cum laude*, minor in Cyber Security**

**May 2023**

**Honors:** GPA: **3.93/4.00**, Dean's List (every semester), Centennial Scholar

## SKILLS

- C++, C, Python, JavaScript, Rust, Snakemake, Asteroid, Database Designing, SQL, Java, HTML, Bash Scripting, OOP
- Windows, Mac, Linux, Git, GitHub, Microsoft Office, Pandas DB, Bootstrap, Collab Notebooks, Trello
- Unit Testing, Database Management, Machine Learning, Data Structures, Algorithms, Computer Hardware, Operating Systems

## EXPERIENCE

### UNIVERSITY OF RHODE ISLAND

**Graduate Research Assistant (Human-Centered Experiential Technologies Lab)**

**August 2023 – Present**

- Collaborate with a team of four on Human-Computer Interaction research to optimize web user experiences.
- Spearhead a project using JavaScript and Rust for readability studies, customizing font preferences to enhance user experiences.
- Successfully measured character height in centimeters using JavaScript, ensuring accurate size representation across browsers for remote studies.

**Graduate Research Assistant (Bioinformatics Lab)**

**July 2023 – August 2023**

- Developed a specialized mitochondrial variant analysis pipeline using Snakemake within four weeks, demonstrating adaptability and rapid skill acquisition, now in effective use at the RI-INBRE bioinformatics lab.

**Lead Information Technology Service Desk Consultant**

**September 2021 – May 2023**

- Promoted from Consultant to Lead in two years for impactful team contributions
- Administered Azure Active Directory for URI, supporting thousands of users and leading multiple projects.
- Routinely analyzed and ascertained the department's IT needs and implemented appropriate solutions in a timely fashion

**Undergraduate Research Intern**

**September 2022 – December 2022**

- Refactored an application written in JavaScript using React and Redux to make the code precise, easy to read and usable for Psychology researchers to analyze data

**Teaching Assistant (Social and Ethical Issues in Computing)**

**September 2021 – May 2023**

- Enhanced student performance by 20% through effective grading and personalized assistance for students
- Reduced administrative workload by 30% in managing the course, efficiently coordinating meetings, grading assignments and supporting colleagues and the professor

## PROJECTS

**Anime Recommender System**

**October 2023 – December 2023**

- Engineered an Anime Recommender System employing collaborative filtering techniques of Machine Learning
- Emphasized user-based filtering in python while exploring item-based methods for enhanced recommendation diversity

**Computational Geometry**

**January 2023 – July 2023**

- Engineered C++ libraries on Open GL for point and segment creation, employing Computational Geometry expertise, Object Oriented Programming and smart pointers to enable intersection detection via brute force and smart algorithm
- Utilized XCode's debugging tools to swiftly troubleshoot code errors, including segmentation faults

**Universal Virtual Machine (UM) in Rust**

**April 2022**

- Developed UM with 8 registers, segmented memory, I/O device, and a 32-bit program counter to parse byte level instructions

**URI Memorial Union Website Redesign**

**September 2021 - May 2022**

- Collaborated with a team member and redesigned school website to improve public engagement by 30% by implementing a new theme, enhancing layout, interactivity and visual appeal using HTML and Graphical User Interface

**Submarine Survival**

**September 2021 - December 2021**

- Created a Java game with a team utilizing Agile, software development life cycle, object-oriented approach, and unit testing
- Produced a comprehensive Software Requirement Specification with UML diagrams and functional requirements